## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/58/1228
Source: IFWP

Date Processed by STIC: 6/9/06

## ENTERED



**IFWP** 

RAW SEQUENCE LISTING DATE: 06/09/2006
PATENT APPLICATION: US/10/581,228 TIME: 10:39:52

Input Set : A:\140140417U2.SEQ.TXT

Output Set: N:\CRF4\06092006\J581228.raw

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4 <110> APPLICANT: John A. Chiorini
             Michael Schmidt
             Ioannis Bossis
             Di Giovanni Pasquale
     9 <120> TITLE OF INVENTION: Bovine Adeno-Associated Viral (BAAV)
             Vector and Uses Thereof
    12 <130> FILE REFERENCE: 14014.0417U2
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/581,228
C--> 14 <141> CURRENT FILING DATE: 2006-06-02
     14 <150> PRIOR APPLICATION NUMBER: PCT/US04/40825
     15 <151> PRIOR FILING DATE: 2004-12-06
     17 <150> PRIOR APPLICATION NUMBER: 60/526,786
     18 <151> PRIOR FILING DATE: 2003-12-04
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                                                                               120
                                                                               180
     36 qagcgaacgc gacagggggg ggagtgccac actctctagc aagggggttt tgtaggtggt
     37 qatqtcattg ttgatgtcat tatagttgtc acgcgatagt taatgattaa cagtcatgtg
                                                                               240
     38 atqtqtqtta tccaatagga tgaaagcgcg cgaatgagat ctcgcgagac ttccggggta
                                                                               300
                                                                               360
     39 taaaaqqqqt qaqtqaacqa gcccqccqcc attctctqct ctqqactqct aqaqqaccct
                                                                               420
     40 cgctgccatg gctaccttct atgaagtcat tgttcgcgtt ccatttgatg tggaagagca
                                                                               480
     41 cctgcctgga atttctgaca actttgtaga ctgggtaact ggtcaaattt gggagctgcc
                                                                               540
     42 tecegagtea gatttgaatt tgaetetgat tgageageet eagetgaegg tggetgaeag
                                                                               600
     43 aattcgccgc gtgttcctgt acgagtggaa caaattttcc aagcaggaga gcaaattctt
     44 tgtgcagttt gaaaagggat ctgaatattt tcatctgcac acgctcgtgg agacctccgg
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     45 catctcttct atggtccttg gccgctacgt gagtcagatt cgcgcccagc tggtgaaggt
                                                                               720
                                                                               780
     46 ggtgttccag aacattgagc cgcggattaa cgactgggtc gccatcacca aggtaaagaa
     47 gggcggagcc aataaggtgg tggattctgg gtatattccc gcctacctgc tgccgaaggt
                                                                               840
     48 ccaaccagag cttcagtggg cgtggactaa cctcgaagag tataaattgg ccgccctcaa
                                                                               900
                                                                               960
     49 totqqaqqaq oqcaaacggo togtogotoa gtttcagott gagtootogo agogotogoa
                                                                              1020
     50 agaggcatet teccagaggg aegtttegge tgacceggte atcaagagea agaetteeea
                                                                              1080
     51 gaaatacatg gcgctggtaa gctggctggt ggaacatggc atcacttccg agaagcagtg
     52 gattcaggag aatcaggaga gctacctgtc cttcaactcc acgggaaact ctcggagcca
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     53 gattaaagee gegettgaea aegegteaaa aattatgagt etgaeeaaat etgeeteaga
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				catttctgaa			1260
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				cttttatggc			1440
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				catcttgggg			1560
				ctctaccccg			1620
				cacgaccttt			1680
62	agaccgcatg	ttcagatttg	aactcatgcg	gcggctcccg	ccagattttg	gcaagattac	1740
				ggcaaaggtc			1800
64	cgagtttatg	gttcccaaga	aagtggcggg	aactgagagg	gcggagactt	ctagaaaacg	1860
65	cccactggat	gacgtcacca	ataccaacta	taaaagtccg	gagaagcggg	cccggctctc	1920
66	agttgttcct	gagacgcctc	gcagttcaga	cgtgcctgta	gagcccgctc	ctctgcgacc	1980
67	tctcaactgg	tcttccaggt	atgaatgcag	atgtgactat	catgctaaat	ttgactctgt	2040
68	aacgggggaa	tgtgacgagt	gtgaatattt	gaatcggggc	aaaaatggct	gtatctttca	2100
69	taatgctaca	cattgtcaaa	tttgtcacgc	tgttcctcca	tgggaaaagg	aaaatgtgtc	2160
70	agattttaat	gattttgatg	actgtaataa	agagcagtaa	ataaagtgag	tagtcatgtc	2220
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72	cggccttgag	gcgggtcccc	cgaaacccaa	ggccaatcaa	cagaagcaag	ataacgctcg	2340
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				ctttgacgac			2760
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				gagccacgtc			2940
				gtacctgcgg			3000
				gggatacttt			3060
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				agttaaggag			3180
				ggtccagatc			3240
				gggcagcttg			3300
				actggtaacc			3360
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				aaacgtgccc			3480
				gctgctggac			3540
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				ctacaagatt			3720
				cgacggaaga			3780
				caccgacttc			3840
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				ggacactgac			3960
						g teggegtgta	4020
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					aacccagagg		4320							
106	gtccaactac	ggagcacagg	actcgcttct	ctgggctccc	gacaacgccg	gagcctacaa	4380							
107	agagcccagg	gccattggat	cccgatacct	caccaaccac	ctctagccca	attctgttgc	4440							
108	ataccctcaa	taaaccgtgt	attcgtttca	gtaaaatact	gcctcttgtg	gtcattcggc	4500							
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142	ccctttaatg	actgtgtgga	aaaaatgttg	atctggtggg	aggagggaaa	gatgaccagc	1140							
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Input Set : A:\140140417U2.SEQ.TXT
Output Set: N:\CRF4\06092006\J581228.raw

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209				340					345					350	_		
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211			355					360					365				
212	Met	Leu	Ile	Trp	Trp	Glu	Glu	Gly	Lys	Met	Thr	Ser	Lys	Val	Val	Glu	
213		370					375					380					
214	Pro	Ala	Lys	Ala	Ile	Leu	Gly	Gly	Ser	Arg	Val	Arg	Val	Asp	Gln	Lys	
215	385					390					395					400	
216	Cys	Lys	Ser	Ser	Val	Gln	Val	Asp	Ser	Thr	Pro	Val	Ile	Ile	Thr	Ser	
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220	His	Gln	Gln	Pro	Leu	Glu	Asp	Arg	Met	Phe	Arg	Phe	Glu	Leu	Met	Arg	
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	465					470					475					480	
		Val	Pro	Lvs	īvs		Ala	Gly	Thr	Glu		Ala	Glu	Thr	Ser		
227					485			V-1		490	5				495	· J	
	Lvs	Ara	Pro	Len		Asp	Val	Thr	Asn		Asn	Tvr	Lvs	Ser		Glu	
229	-	*** 3		500	1100				505			-1-	-1-	510			
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231	_,_	5	515	5		501	••	520					525			<b>-</b>	
	Val	Pro		Glu	Pro	Δla	Pro		Ara	Pro	Len	Asn		Ser	Ser	Arg	
233		530					535		5			540				<b>J</b> .	
	Tvr		Cvs	Ara	Cvs	Asp		His	Ala	Lvs	Phe		Ser	Val	Thr	Glv	
	545		<b>-</b> 1-	5	07.0	550	-1-				555	1-				560	
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	Phe	His	Asn	Ala		His	Cvs	Gln	Ile		His	Ala	Val	Pro	Pro	Trp	
239				580			-1		585	-1-				590		-	
	Glu	Lvs	Glu		Val	Ser	Asp	Phe	Asn	Asp	Phe	asa	Asp	Cvs	Asn	Lys	
241		-2	595					600		•		-	605	•		-	
	Glu	Gln															
243		610															
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																tatctc	180
	-		_					-	-	_					_	gatctc	240
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VERIFICATION SUMMARYDATE: 06/09/2006PATENT APPLICATION: US/10/581,228TIME: 10:39:53

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L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date